Application No.: 10/759,291 Docket No.: CELLTH 3.0-003 CONT CONT I

## IN THE CLAIMS

1. (currently amended) A method for treating acute promyelogenous promyelocytic leukemia in a human comprising administering a therapeutically effective dosage amount of about 0.15 mg/kg arsenic trioxide once per day.

- 2. (original) The method of claim 1, wherein said arsenic trioxide is administered until bone marrow remission, which constitutes a first administration.
- 3. (original) The method of claim 2, further comprising a second administration of a therapeutically effective dosage amount of about 0.15 mg/kg arsenic trioxide once per day for 25 doses.
- 4. (original) The method of claim 3, wherein said second administration is administered 3 to 6 weeks after said first administration.
- 5. (original) The method of claim 4, wherein said second administration is administered for up to five weeks.
- 6. (original) The method of claim 5, wherein said second administration is administered at five doses per week.
- 7. (original) The method of claim 3, further comprising repeating said second administration.
- 8. (original) The method of claim 7, wherein said second administration is repeated every 3 to 6 weeks.
- 9. (original) The method of claim 8, wherein said second administration is repeated until a total of between two and ten cycles of said second administration are completed.
- 10. (original) The method of claim 9, further comprising repeating said second administration until a total of two cycles of said second administration are completed.
- 11. (original) The method of claim 9, further comprising repeating said second administration until a total of ten cycles of said second administration are completed.

Application No.: 10/759,291 Docket No.: CELLTH 3.0-003 CONT CONT I

12. (original) The method of claim 1, wherein said arsenic trioxide is administered for up to sixty days, which constitutes a first administration.

- 13. (original) The method of claim 12, further comprising a second administration of a therapeutically effective dosage amount of about 0.15 mg/kg arsenic trioxide once per day for 25 doses.
- 14. (original) The method of claim 13, wherein said second administration is administered 3 to 6 weeks after said first administration.
- 15. (original) The method of claim 14, wherein said second administration is administered for up to five weeks.
- 16. (original) The method of claim 15, wherein said second administration is administered at five doses per week.
- 17. (original) The method of claim 13, further comprising repeating said second administration.
- 18. (original) The method of claim 17, wherein said second administration is repeated every 3 to 6 weeks.
- 19. (original) The method of claim 18, wherein said second administration is repeated until a total of between two and ten cycles of said second administration are completed.
- 20. (original) The method of claim 19, further comprising repeating said second administration until a total of two cycles of said second administration are completed.
- 21. (original) The method of claim 19, further comprising repeating said second administration until a total of ten cycles of said second administration are completed.